RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: _10 577,775 A_
Source: _IFWO_
Date Processed by STIC: _8/15/07_

ENTERED

IFWO

RAW SEQUENCE LISTING   DATE: 03/15/2007
PATENT APPLICATION: US/10/577,775A   TIME: 10:18:27

Input Set : A:\Sequence Listing.txt
Output Set: N:\CRF4\03152007\J577775A.raw

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 3 <110> APPLICANT: KIM, TAE-YOON
 4       BIO CLUE & SOLUTION CO., LT
 6 <120> TITLE OF INVENTION: EC SOD and Cell transducing EC SOD and use thereof
 8 <130> FILE REFERENCE: 1012679-000121
10 <140> CURRENT APPLICATION NUMBER: US 10/577,775A
12 <141> CURRENT FILING DATE: 2006-04-28
14 <150> PRIOR APPLICATION NUMBER: PCT/KR2004/002757
15 <151> PRIOR FILING DATE: 2004-10-29
17 <150> PRIOR APPLICATION NUMBER: KR10-2003-0076629
18 <151> PRIOR FILING DATE: 2003-10-31
20 <160> NUMBER OF SEQ ID NOS: 33
22 <170> SOFTWARE: KopatentIn 1.71
24 <210> SEQ ID NO: 1
25 <211> LENGTH: 18
26 <212> TYPE: DNA
27 <213> ORGANISM: Artificial Sequence
29 <220> FEATURE:
30 <223> OTHER INFORMATION: primer
33 <400> SEQUENCE: 1
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38 <211> LENGTH: 18
39 <212> TYPE: DNA
40 <213> ORGANISM: Artificial Sequence
42 <220> FEATURE:
43 <223> OTHER INFORMATION: primer
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51 <211> LENGTH: 33
52 <212> TYPE: DNA
53 <213> ORGANISM: Artificial Sequence
55 <220> FEATURE:
56 <223> OTHER INFORMATION: primer
59 <400> SEQUENCE: 3
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63 <210> SEQ ID NO: 4
64 <211> LENGTH: 28
65 <212> TYPE: DNA
66 <213> ORGANISM: Artificial Sequence
68 <220> FEATURE:
69 <223> OTHER INFORMATION: primer
72 <400> SEQUENCE: 4
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76 <210> SEQ ID NO: 5
77 <211> LENGTH: 27
78 <212> TYPE: DNA
79 <213> ORGANISM: Artificial Sequence
81 <220> FEATURE:
82 <223> OTHER INFORMATION: primer
85 <400> SEQUENCE: 5
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89 <210> SEQ ID NO: 6
90 <211> LENGTH: 34
91 <212> TYPE: DNA
92 <213> ORGANISM: Artificial Sequence
94 <220> FEATURE:
95 <223> OTHER INFORMATION: primer
98 <400> SEQUENCE: 6
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102 <210> SEQ ID NO: 7
103 <211> LENGTH: 30
104 <212> TYPE: DNA
105 <213> ORGANISM: Artificial Sequence
107 <220> FEATURE:
108 <223> OTHER INFORMATION: primer
111 <400> SEQUENCE: 7
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116 <211> LENGTH: 31
117 <212> TYPE: DNA
118 <213> ORGANISM: Artificial Sequence
120 <220> FEATURE:
121 <223> OTHER INFORMATION: primer
124 <400> SEQUENCE: 8
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129 <211> LENGTH: 30
130 <212> TYPE: DNA
131 <213> ORGANISM: Artificial Sequence
133 <220> FEATURE:
134 <223> OTHER INFORMATION: primer
137 <400> SEQUENCE: 9
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142 <211> LENGTH: 31
143 <212> TYPE: DNA
144 <213> ORGANISM: Artificial Sequence
146 <220> FEATURE:
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154 <210> SEQ ID NO: 11
155 <211> LENGTH: 240
156 <212> TYPE: PRT
157 <213> ORGANISM: Homo sapiens
159 <220> FEATURE:
160 <221> NAME/KEY: PEPTIDE
161 <222> LOCATION: (1)..(240)
162 <223> OTHER INFORMATION: Human EC SOD
165 <400> SEQUENCE: 11
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169 Asp Ala Trp Thr Gly Glu Asp Ser Ala Glu Pro Asn Ser Asp Ser Ala
170             20                  25                  30
172 Glu Trp Ile Arg Asp Met Tyr Ala Lys Val Thr Glu Ile Trp Gln Glu
173             35                  40                  45
175 Val Met Gln Arg Arg Asp Asp Asp Gly Thr Leu His Ala Ala Cys Gln
176         50                  55                  60
178 Val Gln Pro Ser Ala Thr Leu Asp Ala Ala Gln Pro Arg Val Thr Gly
179 65                  70                  75                  80
181 Val Val Leu Phe Arg Gln Leu Ala Pro Arg Ala Lys Leu Asp Ala Phe
182                 85                  90                  95
184 Phe Ala Leu Glu Gly Phe Pro Thr Glu Pro Asn Ser Ser Ser Arg Ala
185             100                 105                 110
187 Ile His Val His Gln Phe Gly Asp Leu Ser Gln Gly Cys Glu Ser Thr
188         115                 120                 125
190 Gly Pro His Tyr Asn Pro Leu Ala Val Pro His Pro Gln His Pro Gly
191         130                 135                 140
193 Asp Phe Gly Asn Phe Ala Val Arg Asp Gly Ser Leu Trp Arg Tyr Arg
194 145                 150                 155                 160
196 Ala Gly Leu Ala Ala Ser Leu Ala Gly Pro His Ser Ile Val Gly Arg
197                 165                 170                 175
199 Ala Val Val Val His Ala Gly Glu Asp Asp Leu Gly Arg Gly Gly Asn
200             180                 185                 190
202 Gln Ala Ser Val Glu Asn Gly Asn Ala Gly Arg Arg Leu Ala Cys Cys
203         195                 200                 205
205 Val Val Gly Val Cys Gly Pro Gly Leu Trp Glu Arg Gln Ala Arg Glu
206     210                 215                 220
208 His Ser Glu Arg Lys Lys Arg Arg Arg Glu Ser Glu Cys Lys Ala Ala
209 225                 230                 235                 240
212 <210> SEQ ID NO: 12
213 <211> LENGTH: 231
214 <212> TYPE: PRT
215 <213> ORGANISM: Artificial Sequence
217 <220> FEATURE:
218 <223> OTHER INFORMATION: TAT-EC SOD fusion protein
221 <400> SEQUENCE: 12
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223  1               5                  10                  15
225 Glu Pro Asn Ser Asp Ser Ala Glu Trp Ile Arg Asp Met Tyr Ala Lys
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226             20              25              30
228 Val Thr Glu Ile Trp Gln Glu Val Met Gln Arg Arg Asp Asp Asp Gly
229         35              40              45
231 Thr Leu His Ala Ala Cys Gln Val Gln Pro Ser Ala Thr Leu Asp Ala
232     50              55              60
234 Ala Gln Pro Arg Val Thr Gly Val Val Leu Phe Arg Gln Leu Ala Pro
235 65              70              75              80
237 Arg Ala Lys Leu Asp Ala Phe Phe Ala Leu Glu Gly Phe Pro Thr Glu
238             85              90              95
240 Pro Asn Ser Ser Ser Arg Ala Ile His Val His Gln Phe Gly Asp Leu
241         100             105             110
243 Ser Gln Gly Cys Glu Ser Thr Gly Pro His Tyr Asn Pro Leu Ala Val
244         115.            120             125
246 Pro His Pro Gln His Pro Gly Asp Phe Gly Asn Phe Ala Val Arg Asp
247     130             135             140
249 Gly Ser Leu Trp Arg Tyr Arg Ala Gly Leu Ala Ala Ser Leu Ala Gly
250 145             150             155             160
252 Pro His Ser Ile Val Gly Arg Ala Val Val Val His Ala Gly Glu Asp
253             165             170             175
255 Asp Leu Gly Arg Gly Gly Asn Gln Ala Ser Val Glu Asn Gly Asn Ala
256         180             185             190
258 Gly Arg Arg Leu Ala Cys Cys Val Val Gly Val Cys Gly Pro Gly Leu
259         195             200             205
261 Trp Glu Arg Gln Ala Arg Glu His Ser Glu Arg Lys Lys Arg Arg Arg
262     210             215             220
264 Glu Ser Glu Cys Lys Ala Ala
265 225             230
268 <210> SEQ ID NO: 13
269 <211> LENGTH: 218
270 <212> TYPE: PRT
271 <213> ORGANISM: Artificial Sequence
273 <220> FEATURE:
274 <223> OTHER INFORMATION: TAT-delta HD/EC SOD fusion protein
277 <400> SEQUENCE: 13
278 Arg Lys Lys Arg Arg Gln Arg Arg Arg Trp Thr Gly Glu Asp Ser Ala
279 1           5               10              15
281 Glu Pro Asn Ser Asp Ser Ala Glu Trp Ile Arg Asp Met Tyr Ala Lys
282         20              25              30
284 Val Thr Glu Ile Trp Gln Glu Val Met Gln Arg Arg Asp Asp Asp Gly
285         35              40              45
287 Thr Leu His Ala Ala Cys Gln Val Gln Pro Ser Ala Thr Leu Asp Ala
288     50              55              60
290 Ala Gln Pro Arg Val Thr Gly Val Val Leu Phe Arg Gln Leu Ala Pro
291 65              70              75              80
293 Arg Ala Lys Leu Asp Ala Phe Phe Ala Leu Glu Gly Phe Pro Thr Glu
294             85              90              95
296 Pro Asn Ser Ser Ser Arg Ala Ile His Val His Gln Phe Gly Asp Leu
297         100             105             110
299 Ser Gln Gly Cys Glu Ser Thr Gly Pro His Tyr Asn Pro Leu Ala Val
```

```
300          115               120               125
302 Pro His Pro Gln His Pro Gly Asp Phe Gly Asn Phe Ala Val Arg Asp
303      130               135               140
305 Gly Ser Leu Trp Arg Tyr Arg Ala Gly Leu Ala Ala Ser Leu Ala Gly
306 145               150               155               160
308 Pro His Ser Ile Val Gly Arg Ala Val Val Val His Ala Gly Glu Asp
309               165               170               175
311 Asp Leu Gly Arg Gly Gly Asn Gln Ala Ser Val Glu Asn Gly Asn Ala
312          180               185               190
314 Gly Arg Arg Leu Ala Cys Cys Val Val Gly Val Cys Gly Pro Gly Leu
315          195               200               205
317 Trp Glu Arg Gln Ala Arg Glu His Ser Glu
318      210               215
321 <210> SEQ ID NO: 14
322 <211> LENGTH: 231
323 <212> TYPE: PRT
324 <213> ORGANISM: Artificial Sequence
326 <220> FEATURE:
327 <223> OTHER INFORMATION: R9-EC SOD fusion protein
330 <400> SEQUENCE: 14
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332   1               5               10               15
334 Glu Pro Asn Ser Asp Ser Ala Glu Trp Ile Arg Asp Met Tyr Ala Lys
335               20               25               30
337 Val Thr Glu Ile Trp Gln Glu Val Met Gln Arg Arg Asp Asp Asp Gly
338          35               40               45
340 Thr Leu His Ala Ala Cys Gln Val Gln Pro Ser Ala Thr Leu Asp Ala
341      50               55               60
343 Ala Gln Pro Arg Val Thr Gly Val Val Leu Phe Arg Gln Leu Ala Pro
344  65               70               75               80
346 Arg Ala Lys Leu Asp Ala Phe Phe Ala Leu Glu Gly Phe Pro Thr Glu
347               85               90               95
349 Pro Asn Ser Ser Ser Arg Ala Ile His Val His Gln Phe Gly Asp Leu
350               100               105               110
352 Ser Gln Gly Cys Glu Ser Thr Gly Pro His Tyr Asn Pro Leu Ala Val
353          115               120               125
355 Pro His Pro Gln His Pro Gly Asp Phe Gly Asn Phe Ala Val Arg Asp
356      130               135               140
358 Gly Ser Leu Trp Arg Tyr Arg Ala Gly Leu Ala Ala Ser Leu Ala Gly
359 145               150               155               160
361 Pro His Ser Ile Val Gly Arg Ala Val Val Val His Ala Gly Glu Asp
362               165               170               175
364 Asp Leu Gly Arg Gly Gly Asn Gln Ala Ser Val Glu Asn Gly Asn Ala
365          180               185               190
367 Gly Arg Arg Leu Ala Cys Cys Val Val Gly Val Cys Gly Pro Gly Leu
368          195               200               205
370 Trp Glu Arg Gln Ala Arg Glu His Ser Glu Arg Lys Lys Arg Arg Arg
371      210               215               220
373 Glu Ser Glu Cys Lys Ala Ala
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VERIFICATION SUMMARY   DATE: 03/15/2007
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